Edwards,Michelle

From: Ennis,Charles
Sent: Thursday, November 03, 2016 3:28 PM
To: Edwards,Michelle
Subject: FW:
Attachments: 2016-11 Council combined rate storm - sewer (2).pdf; Attach ATerre Haute Sanitary District - 2017 Revenue Bond Timetable (3) (2).docx; Attach B Rev Bond Series 2012 A and B.pdf; Attach C WWU Valuation Supporting Documents.pdf; Attach D umbaughpilotcalc.pdf; Executive Summary - PILOT Calculation.pdf; KEY POINTS SLIDE (2).pptx; Response to Earl (3).docx

Updated info for the council

Charles W. (Chuck) Ennis, P.E., S.E.
City Engineer
City of Terre Haute Department of Engineering
17 Harding Avenue, Room 200
Terre Haute, IN 47807
Telephone: (812) 232-4028
Fax: (812) 234-3973

From: Ennis,Charles
Sent: Thursday, November 03, 2016 3:03 PM
To: Bennett,Duke A
Subject:

Charles W. (Chuck) Ennis, P.E., S.E.
City Engineer
City of Terre Haute Department of Engineering
17 Harding Avenue, Room 200
Terre Haute, IN 47807
Telephone: (812) 232-4028
Fax: (812) 234-3973

Compounded Increases Using a One-Time 3% Reduction in Usage

Option 1: 11% Rate Increases	Avg Resi Bill		46.45			
Step One 11%	Min Bill Rate		25.71			
- Metered Accounts	Metered	$	8.21		$	26,217,651
- Well Accounts	Well Rate	$	47.45		$	2,046,531
				Sewer Revenue	$	28,264,182
				Change	$	571,467
Step Two 11% Compounded	Avg Resi Bill		51.56			
- Metered Accounts	Min Bill Rate		28.54			
- Well Accounts	Metered	$	9.12		$	29,101,592
	Well Rate	$	52.67		$	2,271,650
				Sewer Revenue	$	31,373,242
				Change	$	3,680,527

NOTES and Other Numbers

Average number of Accounts Billed		29,185
Average Number of Metered Accounts		25,591
Average Number of Well Water Accounts		3,594
Average Metered Residential Bill	$	41.83
Average Number of Minimum Bills		9,962
% Units of Usage from Minimum Bills		6.30%

Usage Amount for Metered Accounts

Total Billed Units (CCF) Sept. 2015 - Aug. 2016	3,290,542
Average Number of Metered Accounts	25,591
Average Number of Well Accounts	3,594

Billed Units (CCF) Decline Year over Year

	2014 to 2015	-2.25%
Year-over-Year	2015 to 2016	-6.11%

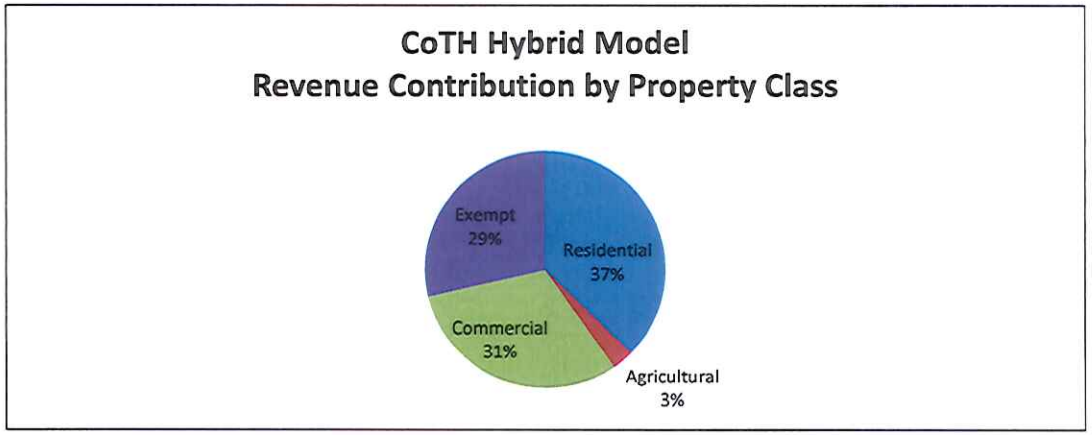
Min. Bill Units Consumed	Billed Units	Total Min Bills	Total Units Billed
0	0	20,906	0
1	1	26,655	26,655
2	2	35,422	70,844
3	3	36,556	109,668
	12 Month Total	**119,539**	**207,167**

Stormwater Rate

Enter Agriculture Rate:	$0.50
Enter Residential Rate:	$3.50
Enter Non-resi. Rate:	$3.50

CLASSIFICATION	DESCRIPTION	MULTIPLIER	RATE PER MONTH	SEMIANNUAL RATE	ANNUAL RATE	PARCEL COUNT	MONTHLY REVENUE	ANNUAL REVENUE
A	Agricultural Flat Rate		$0.50	$3.00	$6.00	643	$7,207.33	$86,487.95
Resi & Vac-Resi	Residential - Banded					29,180	$92,391.25	$1,108,695.00
1	Other ≤ 5,000 ISF	1	$3.50	$21.00	$42.00	3,619	$12,666.50	$151,998.00
2	Other 5,001 - 11,000 ISF	3	$10.50	$63.00	$126.00	1,312	$13,776.00	$165,312.00
3	Other 11,001 - 22,000 ISF	6	$21.00	$126.00	$252.00	752	$15,792.00	$189,504.00
4	Other 22,001 - 34,000 ISF	11	$38.50	$231.00	$462.00	324	$12,474.00	$149,688.00
5	Other 34,001 - 56,000 ISF	17	$59.50	$357.00	$714.00	289	$17,195.50	$206,346.00
6	Other 56,001 - 94,000 ISF	28	$98.00	$588.00	$1,176.00	207	$20,286.00	$243,432.00
7	Other 94,001 - 147,000 ISF	47	$164.50	$987.00	$1,974.00	130	$21,385.00	$256,620.00
8	Other 147,001 - 235,000 ISF	75	$262.50	$1,575.00	$3,150.00	103	$27,037.50	$324,450.00
9	Other 235,001 - 500,000 ISF	133	$465.50	$2,793.00	$5,586.00	75	$34,912.50	$418,950.00
10	Other > 500,000 ISF	200	$700.00	$4,200.00	$8,400.00	40	$28,000.00	$336,000.00

	Contribution
Residential	$1,108,695.00
Agricultural	$86,487.95
Commercial	$922,320.00
Exempt	$850,962.00



BOSE
McKINNEY
& EVANS LLP
ATTORNEYS AT LAW

CITY OF TERRE HAUTE, INDIANA, LTCP PHASE II SANITARY DISTRICT REVENUE BONDS, (IC 36-9-25 – payable solely from Net Revenues of the Sanitary District)

FINANCIAL INFORMATION

Financing Schedule	TOTAL
	$42 M

Milestone	Action
May 2017	First Escrow Payment
Amt of Escrow pmt	$185,000*/mo

*Estimated, interest only until 07/01/2020 then P&I. Pending SRF approval. Existing Bond Amortization Schedule is set up this way.

PROPOSED TIMETABLE

Date	Action
October 2016	Send out RFQ's to Engineers
November 2016	Select Engineer & Begin Design
By end of November, 2016	Sewer/Storm Water Rate Resolution of Board of Sanitary Commissioners ("Board") and approving Ordinance of Common Council of City adopted
Early January	Declaratory Resolution and Bond Resolution prepared; Accounting Report for bonds prepared
January 17	Board meets to adopt Declaratory Resolution and Bond Resolution, sets date for public hearing on projects approved by Declaratory Resolution
January 20	Notice of public hearing on projects approved by Declaratory Resolution published in the *Tribune-Star* (at least 10 days prior to the public hearing) and mailed to any property owners with property to be appropriated and/or entities requesting notice
Late January	Request for consent for issuance of first series of bonds filed with the SRF Program

February 7	Board meets to hold public hearing on projects approved by Declaratory Resolution; adopts Confirmatory Resolution
February 17	10-day objecting period on Confirmatory Resolution expires
Late February	SRF Program provides consent for issuance of first series of bonds; apply for rating for first series of bonds
Mid-March	Receive rating for first series of bonds
March 15	Notice of intent to sell first series of bonds published (first time) in the *Tribune-Star* and the *Court & Commercial Record*
March 22	Notice of intent to sell first series of bonds published (second time) in the *Tribune-Star* and the *Court & Commercial Record*
March 29	24 hours' notice of sale given to bidders
March 30	Bond sale for first series of bonds*
Week of April 3	Closing documents prepared and circulated for signature for first series of bonds
April 12	Closing on first series of bonds; proceeds available for disbursement on planning/design costs for projects
Early August	Apply for rating for second series of bonds; request for consent for issuance of second series of bonds filed with the SRF Program
Mid-August	Project planning/designing completed, bids advertised and received for projects; second series of bonds sized based upon bids
By end of August	Rating received on second series of bonds; receive consent from SRF Program for issuance of second series of bonds
August 30	Notice of intent to sell second series of bonds published (first time) in the *Tribune-Star* and the *Court & Commercial Record*
September 6	Notice of intent to sell second series of bonds published (second time) in the *Tribune-Star* and the *Court & Commercial Record*
September 13	24 hours' notice of sale given to bidders

September 14	Bond sale for second series of bonds*
Week of September 18	Closing documents prepared for second series of bonds and circulated for execution
September 27	Preclosing
September 28	Closing – proceeds of second series of bonds deposited to construction fund
October 3	Board meets to sign construction contracts and give notice to proceed with construction
October 16	Break Ground
January 1 2018	First Bond Payment (Interest only $1.45M)
December 2018	Complete Construction

* Assumes bonds will be sold by competitive sale; if bonds are sold to the SRF Program then rating/sale notice procedures will not be required but application materials will need to be filed with the SRF Program.

CITY OF TERRE HAUTE, INDIANA

Sanitary District Revenue Bonds, Series 2012A&B

Closing Date: December 13, 2012

amount does not exceed the least of (i) the maximum annual debt service on the Bonds ($11,105,779.60), (ii) 125% of the average annual debt service on the Bonds ($9,965,431.90), or (iii) 10% of the proceeds of the Bonds ($13,937,100).

The Reserve Account may be used to pay the principal of and interest on the Bonds notwithstanding that the Issuer expects to make such payments from the Bond and Interest Account referred to in (1) above. The Reserve Account will be treated as a sinking fund under Section 1.148-1(c)(2) of the Regulations. The Issuer expects that the moneys in the Reserve Account will be available to pay debt service on the Bonds and the Reserve Account will therefore be treated as a pledged fund under the Regulations.

Based upon the recommendation of its financial advisor attached hereto as Exhibit B, the Issuer reasonably believes that the Reserve Account enhances the Issuer's ability to market the Bonds and that without the Reserve Account, the Bonds would (i) not be marketable or (ii) if marketable, the interest rate demanded by investors without the Reserve Account would cause the Projects to be economically infeasible. Therefore, the Issuer concludes that the Reserve Account is a reasonably required reserve under the Code and Section 1.148-2(f) of the Regulations.

(c) Sewage Works Improvement Fund. After meeting the required payments into the O&M Fund and the Sinking Fund, the Bond Resolution provides that any excess Net Revenues shall be transferred to the Sewage Works Improvement Fund (the "Improvement Fund"). According to the Engineers, such transfers to the Improvement Fund are reasonable for a sewage works of the size and type operated by the Issuer. The moneys held in the Improvement Fund may be used to pay debt service on the Bonds; however, it is anticipated that the moneys held in the Improvement Fund will be expended for improvements, replacements, additions and extensions of the sewage works, and for payment in lieu of taxes. The Issuer has not covenanted to provide revenues sufficient to fund the Improvement Fund, does not expect to use moneys in the Improvement Fund to pay debt service on the Bonds, and there is no reasonable assurance to purchasers of the Bonds that moneys will be available in the Improvement Fund to pay debt service on the Bonds. Therefore, the Improvement Fund is neither a pledged fund, a sinking fund, nor replacement proceeds under the Regulations, and the moneys held therein will be invested without restriction as to yield.

8. Replacement Proceeds. Replacement proceeds will not arise under Section 1.148-1 of the Regulations with respect to the Bonds because:

(a) No portion of the proceeds of the Bonds will be used as a substitute for other funds which would otherwise have been used to pay the principal of, premium, if any, or interest on the Bonds and which will be used directly or indirectly to acquire obligations producing a yield in excess of the yield on the Bonds (as described in Section 12 of this certificate);

(b) The weighted average maturity of the Bonds (14.876 years), as described in Exhibit C, is less than 120% of the reasonably expected economic life of the Projects financed with the Bond proceeds (30 years), as shown on the Project Certificates; and

EXHIBIT A

TERRE HAUTE (INDIANA) SANITARY DISTRICT
- Wastewater Utility -

COMPARISON OF NET REVENUES WITH 125% OF MAXIMUM ANNUAL PRINCIPAL AND INTEREST REQUIREMENT OF THE SANITARY DISTRICT REVENUE BONDS OF 2005, 2011 AND 2012

Maximum annual principal and interest requirement:	
Bond year ending January 1, 2036 (see Exhibit B)	$11,105,780
Times 125% test	x 125%
Minimum Net Revenues required by Resolution No. 6	$13,882,225
Comparison of Net Revenues with 125% of maximum annual principal and interest requirement:	
Net Revenues - 2011 (see Exhibit G)	$21,518,827
Less: 125% of the maximum annual bond principal and interest requirement	(13,882,225)
Total Net Revenues in Excess of Minimum Requirements	$7,636,602

(Subject to the comments in the attached report dated December 13, 2012 of Umbaugh.)

(b) Debt Service Reserve Account. There is hereby continued, within the Sinking Fund, the Debt Service Reserve Account (the "Reserve Account"). On the date of delivery of the Bonds, funds on hand of the Sanitary District, Bond proceeds, or a combination thereof may be deposited into the Reserve Account. The balance to be maintained in the Reserve Account shall be held but not exceed the least of (i) the maximum annual debt service on the Bonds, the Outstanding Parity Bonds and any bonds issued in the future by the Sanitary District which are payable from the Net Revenues of the sewage works and which rank on a parity with the Bonds ("Parity Bonds"), (ii) 125% of average annual debt service on the Bonds, the Outstanding Parity Bonds and any Parity Bonds, or (iii) 10% of the proceeds of the Bonds, the Outstanding Parity Bonds and any Parity Bonds (the "Reserve Requirement"); provided, however, that if any Bonds are sold to the Authority as part of its IFA Programs, the Reserve Requirement shall equal the maximum annual debt service on the Bonds, the Outstanding Parity Bonds and any Parity Bonds.

If on the date of delivery of the Bonds no deposit is made to the Reserve Account, or the initial deposit into the Reserve Account does not cause the balance therein to equal the Reserve Requirement, beginning with the first month after the Bonds are delivered an amount of Net Revenues shall be credited to the Reserve Account on the last day of each calendar month until the balance therein equals the Reserve Requirement. The monthly deposits shall be equal in amount and sufficient to accumulate the Reserve Requirement within five (5) years of the date of delivery of the Bonds.

The Reserve Account shall constitute the margin for safety and as protection against default in the payment of principal of and interest on the Bonds, the Outstanding Parity Bonds and any Parity Bonds, and the moneys in the Reserve Account shall be used to pay current principal and interest on the Bonds, the Outstanding Parity Bonds and any Parity Bonds to the extent that moneys in the Bond and Interest Account are insufficient for that purpose. Any deficiency in the balance maintained in the Reserve Account shall be promptly made up from the next available Net Revenues remaining after credits into the Bond and Interest Account. In the event moneys in the Reserve Account are transferred to the Bond and Interest Account to pay interest and principal on the Bonds, the Outstanding Parity Bonds or any Parity Bonds, then such deficiency in the balance in the Reserve Account shall be made up from the next available Net Revenues after the credits into the Bond and Interest Account. Any moneys in the Reserve Account in excess of the Reserve Requirement shall either be transferred to the Sewage Works Improvement Fund or be used for the purchase of outstanding bonds or installments of principal of fully registered bonds at a price not exceeding par and accrued interest or may be used for the prepayment of installments of principal and interest on the then outstanding bonds which are then callable or prepayable, including any redemption premiums.

Section 16. Sewage Works Improvement Fund. There is hereby continued a special fund designated the "Sewage Works Improvement Fund" (the "Improvement Fund"). In the event all required payments into the O&M Fund and the Sinking Fund have been met to date, any excess Net Revenues may be transferred to the Improvement Fund for extensions, replacements, improvements and additions to the works or for any other lawful purpose. No

BOARD OF SANITARY COMMISSIONERS
TERRE HAUTE SANITARY DISTRICT

BOND RESOLUTION NO. 3

A Resolution concerning the construction of additions and improvements to the sewage works of the Terre Haute Sanitary District, the issuance of bonds to provide the cost thereof, the collection, segregation and distribution of the revenues of said works, the safeguarding of the interests of the owners of said bonds, other matters connected therewith, including the issuance of notes in anticipation of bonds, and repealing resolutions inconsistent herewith

WHEREAS, the Board of Sanitary Commissioners ("Board") of the Terre Haute Sanitary District ("District") of the City of Terre Haute, Indiana ("City") finds that certain improvements and extensions to said works are necessary; that certain reports containing general plans, specifications, descriptions and estimates have been prepared and filed by engineers employed by the District for the construction of said improvements and extensions (as more fully set forth in summary fashion in Exhibit A hereto and made a part hereof) ("Project"), which plans and specifications have been or will be submitted to all governmental authorities having jurisdiction, particularly the Indiana Department of Environmental Management, and will be approved by the aforesaid governmental authorities and will be open for inspection at the office of the Board as required by law; and

WHEREAS, on November 15, 2004, the Board, being the governing body of the District, adopted a Declaratory Resolution declaring that it is necessary for the public health and welfare and will be of public utility and benefit to (i) construct the Project as more fully described in said

the Debt Service Reserve Account ("Reserve Account"). On the date of delivery of the Bonds, funds on hand of the sewage works, Bond proceeds, a surety bond, or a combination thereof shall be deposited into the Reserve Account. The balance to be maintained in the Reserve Account shall equal but not exceed an amount equal to the least of (i) maximum annual debt service on the Bonds (ii) 125% of average annual debt service on the Bonds, or (iii) 10% of the proceeds of the Bonds ("Reserve Requirement").

The District may fund all or part of the Reserve Account with a debt service reserve surety bond. The surety bond must be issued by an insurance company rated in the highest rating category by Standard & Poor's Corporation and Moody's Investors Service. The Reserve Account shall constitute the margin for safety and as protection against default in the payment of principal of and interest on the Bonds and any parity bonds, and moneys in the Reserve Account shall be used to pay current principal and interest on outstanding Bonds and any parity bonds to the extent that moneys in the Bond and Interest Account are insufficient for that purpose. Any deficiency in the balance maintained in the Reserve Account shall be made up from the next available Net Revenues remaining after credits into the Bond and Interest Account. In the event moneys in the Reserve Account are transferred to the Bond and Interest Account to pay interest and principal on the Bonds or any parity bonds, then such depletion of the balance in the Reserve Account shall be made upon the next available Net Revenues after the credits into the Bond and Interest Account. Any moneys in the Reserve Account in excess of the Reserve Requirement shall either be transferred to the Sewage Works Improvement Fund or be used for the purchase of outstanding bonds or installments of principal of fully registered bonds at a price not exceeding par and accrued interest or may be used for the prepayment of installments of

STATE OF INDIANA

DEPARTMENT OF LOCAL GOVERNMENT FINANCE

INDIANA GOVERNMENT CENTER NORTH
100 NORTH SENATE AVENUE N1058(B)
INDIANAPOLIS, IN 46204
PHONE (317) 232-3777
FAX (317) 974-1629

Frequently Asked Questions

Assessment Appeals 101

July 28, 2014

1. **Question: I received a Notice of Assessment (Form 11) in the mail. How do I know if my assessed value is correct?**

Answer: The assessed value should reflect the amount a willing buyer would pay for the property at the time of the assessment (March 1 is the assessment date. NOTE: The assessment/valuation date will change to January 1st in 2016). When a property owner receives a notice of assessment, the best way to determine if it is accurate is to question if the property could have sold for approximately that amount.

2. **Who should I contact to initiate an appeal of the assessed value of my home?**

Answer: The first step in the appeals process begins with written notification to the appropriate local official. A taxpayer may elect to do one of the following and submit the appeal to the appropriate local official:

- File an Appeal Form 130 with the local assessor - https://forms.in.gov/Download.aspx?id=4816 is for "subjective" appeals (e.g., you believe the assessed value is incorrect),
- File an Appeal Form 133 with the local assessor - https://forms.in.gov/Download.aspx?id=4728 is for "objective" appeals (e.g., I was assessed for a fireplace, and I do not have a fireplace) or,
- Submit a written appeal (including information such as the name of the taxpayer, the property address, parcel number, contact information, etc.) to the local assessor.

A taxpayer has forty-five (45) days after the date of the notice of assessment to file an appeal. If a notice of assessment is not sent, then the taxpayer must file an appeal no later than May 10 or 45 days after the date of the tax statement (tax bill), whichever is later. Appeals begin at the local level and can be appealed to the state (Indiana Board of Tax Review) only after being reviewed locally.

Valuing Water and Sewer Utilities

Generally Accepted Appraisal Methods

by David Findlay, CPA, CMC

There are a number of technical and subjective methods used to appraise or ascertain the "fair market value" of a water or sewer utility. These methods, both technical and subjective, have inherent merits and weaknesses. The selection of an appropriate method can be confusing. Furthermore, an appraisal should take into consideration whether the sales transaction is for "assets" or for "stock." This is because the negotiated price will usually differ depending on the type of sales transaction and seller and buyer goals.

Water and sewer utilities are not high profit ventures. They are capital intensive, reasonable low risk operations. They rely on growth in customer base, operational and administrative economies of scale and a functional, depreciable physical plant that has the capacity to serve the customer on demand.

Today, the basic or more common appraisal approaches applied in determining a fair market or simply a fair value for the purchase of a water and/or sewer utility are usually referred to as the Income Approach, the Market Approach, and the Cost Approach. There are a number of analytical valuation methods within each of these approaches, such as:

1. Total net book value (total assets at original cost less depreciation) basis – normally supports a simple stock purchase and the buyer assumes responsibility for all debt in addition to the purchase price. (Cost Approach)

2. Total net book value plus a premium multiplier – normally applicable to publicly traded water companies. Premiums often range between 10% and 50% if there are value added benefits to the purchase. (Cost / Income Approach hybrid)

3. Historical dividend payment plus dividend growth rate per share; a good public stock market value indicator. (Income Approach)

4. Capitalized pre-tax earnings and cash flows – can be used for an asset or stock purchase; a very reliable indicator of the value to the seller and the affordability to the buyer to pay the negotiated or even the asking price.

5. Amount of Rate Base that a regulating body would allow the owner an annual rate of return (ROR) to be earned upon, or a profit realized. Rate Base includes the book value of allowable

plant assets, working capital and other adjustments to liquid assets, normally excludes all contributed capital, and has an original plant-in-service cost basis. (Income Approach)

6. Adjusted book value – reflects certain appreciation in land, excess water rights and facilities as well as deductions for poor condition and regulatory compliance invest or cost needs. (Cost Approach)

7. Original cost less depreciation of physical infrastructure – ignores other liquid assets such as cash inventory and materials. (Cost Method)

8. Reproduction or replacement cost less accumulated depreciation less projected rehabilitation, replacement and regulatory compliance costs – sometimes applicable in a condemnation or receivership proceeding. The condemner sometimes takes the assets with capacity to serve and avoids the need to build that capacity in today's dollars. This method represents a value or opportunity cost to the buyer but has seldom prevailed in an adjudicated pricing decision in recent years. (Cost Approach)

9. Comparable Sales – a compilation and comparison of period sale and purchase transactions, usually prepared as a price per connection or equivalent unit of service. In the State of Washington, this has become a more and more reliable indicator of fair market value, although there is a significant range of negotiated price per connection results. Requires substantial amount of research and even discussion with sellers and buyers to better understand the negotiated price in relation to the assets and connections acquired. (Market Approach)

In recent years, the more acceptable and common approaches to appraising water and sewer utilities are the first five and the ninth methods.

Key factors that affect the results and the appropriateness of the value tend to revolve around the issue of outstanding long-term debt, the degree that utility assets and working capital are leveraged, and the weighted average cost of capital. There is usually a direct correlation between net pre-tax earnings, cash flow, dividend payments, rate of annual reinvestment, Rate Base and net book value. However, the overriding factor will often be the average age and the condition of the depreciable utility plant in service assets such as wells, pumps and mains. Another critical matter for water systems is the status of the comprehensive planning and identified regulatory compliance related requirements that will need to be addressed by the seller or buyer (usually addressed in the negotiated sale-buy agreement).

In our experience, there are very few regulated buyers that will pay much of a premium above book value unless there is significant cash flow, little debt and a substantial Rate Base to warrant the payment for goodwill if that goodwill cannot be recovered later as a function of allowable costs embedded in the utility rates. This means that regulated buyers will look for values that approximate book value because the premium prices paid above the rate base value will not normally be allowed into the Rate Base or the depreciation cost within the approved tariff. The net result can be that the

buyer might not be allowed to earn a partial or full rate of return or profit on the paid price premium, thus making the investment yield less than other market investment alternatives.

Finally, the ratepayer must be considered in the overall validity check of fair value. I believe that utilities have an implicit charter to provide needed services at a reasonable price, but not at rates that lose money and erode the overall value of the system assets. The test is to identify if the buyer can earn an adequate return without causing rate/tariff increases once a purchase transaction is executed. Customers are expected to pay for the costs of service and the cost of capital, not for prior year losses, nor non-beneficial purchase price premiums. Since a large portion of water and sewer assets have been directly or indirectly contributed by the customers to the utility, there is an ethical expectation that those customers will not be made to pay for those same assets again through rates structured to recover inordinate purchase prices. Regardless, that does not mean that an owner should not be able to sell the utility for a fair value within the framework of a willing seller and a willing buyer negotiation.

Thus we have a definite conclusion: We can assume at the start, a premise that the baseline value will likely approximate the adjusted book value reflecting the age, condition and compliance related attributes of the utility system assets. All three approaches of appraisal need to be used where an independent and objective formal appraisal report is required. However, where each party, seller and buyer, commission an appraisal to best represent their respective positions, one or more approaches and methods might serve the purpose.

At FCS GROUP, we then test the historical and projected earnings and cash flows of the utility to determine if a purchase discount or premium on adjusted book value might be warranted. The issue of an allowable Rate Base should be reconciled, evaluated and then linked to earnings, equity capital reinvestment and perhaps even annual dividend practices. Finally, we perform a market comparison of recent sales transactions and traded stock of public water and/or sewer companies to at a minimum establish the face and content validity of the alternative values derived from the other approaches.

In summary, there is really no one method for determining the appropriate value of a water and/or sewer utility. The buyer is looking for a lower price, the seller a higher price. In the final analysis, the transaction will likely be a win-win for the buyer and seller with neither party getting everything they were hoping for in the agreement. This win-win result will be reflected in the customer/taxpayer's contribution, as the ultimate party, toward paying a fair price.

First Published, July 1992, Last Reviewed and Updated, April 2004

For more information on this subject, send an email to: davidfl@fcsgroup.com.

Ellis,Leslie

From:	Deen Rogers [rogers@umbaugh.com]
Sent:	Thursday, November 03, 2016 12:50 PM
To:	Ellis,Leslie
Cc:	swalker@publicsectorllc.com
Subject:	PILOT

Leslie,

I have analyzed the asset information and PILOT calculation compiled by Scott. I find it to be reasonable, and I'm in agreement with the methodology and result of the calculation. I believe this methodology provides a reasonable upper parameter to be used in determining the desired PILOT.

As you know, Scott spent a significant amount of time on this. In order to do an independent evaluation, we would also have to spend a significant amount of time analyzing expenditures from 2011 forward. I have no reason to believe that the results of our analysis would significantly vary from Scott's.

UMBAUGH

INSIDE Public Accounting 2016 BEST OF THE BEST FIRMS

INSIDE Public Accounting 2016 FASTEST-GROWING FIRMS

Deen Rogers, CPA

Principal

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November 1, 2016

City of Terre Haute Wastewater Treatment Plant Valuation and PILOT calculations:

Executive Summary:

The PILOT calculation for the Wastewater treatment plant is dependent on an accurate assessed value. The Department of Local Government Finance (DLGF) defines an accurate assessed value as the following. ***"The assessed value should reflect the amount a willing buyer would pay for the property at the time of the assessment."*** We have included the DLGF statement in this packet for your review.

In order to calculate an accurate assessed value for a utility, it is important to see how market based professionals assess utilities. We have included an article on utility assessment by David Findlay, CPA, CMC who is from the firm of FCS Group. FCS Group is comprised of a team of professionals that provide financial information along with rate studies and valuations to the utility market . The article is titled *"Valuing Water and Sewer Utilities – Generally Accepted Appraisal Methods"*.

Within the article, there are nine ways to calculate Water and Sewer utility valuations. The most conservative one referenced, is the Book Value Method. They describe the Book Value Method as the following:

> *"Total net book value (total assets at original cost less depreciation) basis – normally supports a simple stock purchase and the buyer assumes responsibility for all debt in addition to the purchase price" (Cost*

For this valuation, we have excluded the value of the relinquishment of debt. On the open market, for the City of Terre Haute Wastewater Utility, that would add approximately $180 million to the current book value. For our purposes, we are only using the book value method.

We have attached the detail to our calculations as part of this document for your review including a description of the methodology and accompanying work papers.

In summary, our valuation at the end of the last complete year (FY 2015) is the following:

Capital assets not being depreciated:	$ 191,337,959.19
Assets being depreciated	173,133,957.75
Less Accumulated Depreciation	(50,087,466.38)
Total Valuation	$ 314,384,450.60
Less depreciated assets outside the city:	(12,390,063.82)
Net City Capital Assets:	$ 301,994,386.74

The City of Terre Haute Corporate rate for FY 2016 was .019879 – Under this method, the allowable PILOT payment to the City would be $6,033,346.41

Notes:

#1 In consultation with the city engineer, the utility department, and H J Umbaugh, we have estimated that approximately 10% of the improvements and 17% of the collection systems reside outside the city. With that in mind, we netted out the value of those assets and have discounted the PILOT valuation by that amount. (see Less depreciated assets outside the city: referenced in the above table)

#2 Using the valuation of Book Value only, denigrates the amount that would be realized through an actual sale on the open market. The open market pricing customarily includes outstanding debt. That inclusion would increase the market price to around $ 480 million.

#3 This is a conservative valuation method. Many valuations include a premium of 10% - 50% for depreciated infrastructure assets still in use.

#4 The capital asset compilations are based on 2011 audited financial statements plus projects 19, 20, 21 and 22 in the Sanitary District Funds. Values were added for subsequent years using the State Board of Accounts compilation methods in use for the last ten years.

#5 The compilation is unaudited and is not presented as such. The compilation is a presentation of data based on the governmental Unit's electronic data systems.

#6 The capital asset compilations are not a formal financial statement of the City of Terre Haute, but comprise work papers that can be used in the compilation of formal financial statements which are subject to audit by the State Board of Accounts and if necessary correction.

Technical Method Used for Wastewater Utility Valuation:

The last time that the State Board of Accounts actually audited fixed assets was as part of the GASB 34 accrual financial statement produced in 2011. In order to find a starting point, we used the 2011 capital asset values. At that time, the sanitary district projects were accounted for under general government assets. Therefore in order to get a good picture of the capital assets of the Wastewater utility, the capital assets of the sanitary district had to be added to the fixed assets of the wastewater utility. The first sheet labeled "FY 2011-Combination-WWU and Sanitary District Worksheet" is the product of that work. There is a depreciation worksheet that includes all of the known capital assets at 2011. All the asset totals are set up with accumulated depreciation and with the depreciation life times that were assigned by the State Board of Accounts. Total asset depreciation tables were in place to start the compilation of subsequent years.

The method to compile the years 2012-2015 is the following:

1. Capital asset acquisitions were compiled from the city's audited transactions by extracting them from the city's electronic financial system.
2. The capital asset acquisitions were added to the Construction Work in Progress worksheet (CWIP)and then added to the column of new acquisitions for a specific year.
3. Land equipment and bond costs were subtracted from the CWIP totals.
4. Any projects that were completed during the fiscal year were transferred from the CWIP totals and added to the depreciation sheet. The depreciation sheet then updated the depreciation schedule.
5. Each year the accumulated depreciation in the depreciation worksheet was adjusted to reflect new accumulated depreciation totals
6. The statement of capital assets (format from the State Board of Accounts 2011 audit) was then updated with the totals for each category of assets.
7. The sheet then calculates all of the new asset totals and reports at the end of the year the total of all of the net depreciated assets.
8. Each subsequent year has been reconciled against the previous year.

We pulled the bond issuance costs out of the valuation for the PILOT since GASB 65 presents the bond issuance premiums and costs as deferred ins and outs. The GASB 65 presentation has the same net effect on the financial statements but in the interest of being conservative with our estimate, be accurate for the PILOT, we pulled out those values.